

A STUDY ON NON-COMMUNICABLE DISEASES

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Development Management

By

Sakshi Katiyar

Under the Supervision and Guidance of

Dr. Ratna Verma

2024

BP/Intern/2024/001



CERTIFICATE

This is to certify that **Sakshi Katiyar**, student of IIHMR Jaipur, has successfully completed the summer internship at **Basic Paradigm** from 18th March to 18th June.

During the period of her internship program with us, she has been exposed to proposal development, research and scientific writing. She was found diligent and hard working.

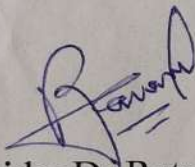
We wish her every success in her life and career.

25th June 2024


Dr. Pramod Gautam
Chief Managing Director

Certificate From Faculty Guide

This certifies that Ms. Sakshi Katiyar's dissertation, "A Study on Non-Communicable Diseases," is an account of the research work completed under my direction and supervision for the IIHMR University in Jaipur as a partial fulfilment of the requirements for the award of the MBA (Development Management) degree.

A handwritten signature in blue ink, appearing to read 'Ratna Verma'.

Faculty Guide: Dr Ratna Verma

IIHMR University, Jaipur

Date:

A handwritten signature in blue ink, appearing to read 'Himadri Sinha'.

School Dean: Dr Himadri Sinha

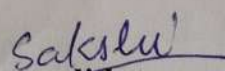
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DECLARATION BY STUDENT

I hereby declare that this dissertation titled 'A STUDY ON THE NON-COMMUNICABLE DISEASES' is the Bonafede record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Name: - Sakshi Katiyar

Signature of the candidate 

Date: -

A STUDY ON NON-COMMUNICABLE DISEASES

Dissertation submitted

**For the partial fulfillment for the award of the degree of MBA
Development Management**

By

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Under the supervision and guidance of

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Completion Certificate



Certificate From Faculty Guide

This is to certify that the dissertation titled ‘*A Study on Non-Communicable Diseases*’ is a record of the research work undertaken by Ms. Sakshi Katiyar in partial fulfilment of the requirements for the award of the degree of MBA (Development Management) from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

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Acknowledgement

It has taken twelve weeks to prepare this report with the guidance of many people. I want to thank each one of them. Throughout the process of authoring this report, I would like to thank Mr. Promod Gautam Sir, for giving me the chance to study, and to Ms. Shalini Mondal, Project Lead, at Basic Paradigm India, who has been supportive in doing the dissertation in the Basic Paradigm, India. I would like to thank my organizational mentor, Mr. Malay Das MERL, as well as Administration, for their guidance, support, and continuous supervision. I would like to thank all departmental heads who contributed to completing the project as well as for departmental education. Thank you for all your assistance and information, and especially to the staff of Basic Paradigm.

I would like to acknowledge Dr. Ratna Verma Associate Professor, IIHMR University for instilling the right attitude in me towards learning, helping, and supporting whenever needed. It would have been incomplete without your acknowledging the support and assistance of my colleagues.

Place: New Delhi

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Abstract

Non-communicable diseases (NCDs) represent a crucial field of interest in global health considering their chronicity and consequences on both the individuals affected by them as well as healthcare systems. In this review, we aimed to examine the epidemiology and risk factors of non-communicable diseases (NCDs) particularly cardiovascular disease, diabetes mellitus cancer respiratory examples for world health impact some successful management strategies recommended by World Health Organization. The study brings together literature and statistics to gain an overview of NCDs among different target populations and geographical areas. Circumstantial evidence over risk issues like life style (diet, physical activity and smoke), genetic predispositions or socio-economic determinants are carefully evaluated in order to know how they influence disease manifestation. The former will examine the impact of effective prevention and control measures, public health interventions and healthcare policies on reducing NCD burden. Key messages These findings highlight a pressing requirement for combined strategies which encompass preventive measures alongside early detection and treatment to address the emerging global non-communicable disease burden.

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Chapter 1: Introduction

Background

NCDs are like cardiovascular diseases, diabetes, cancer and chronic respiratory diseases are causing the mortality in all over the world. Every year the non-communicable diseases kills 41 million of people in the world. These four diseases are account for all premature death approximately 80 percent from non-communicable diseases. The major risk factors of non-communicable diseases are physical inactivity, alcohol consumption, tobacco use, and unhealthy diets. The no. of people dies every year between the age of 30-69 is 15 million from non-communicable diseases. All the premature deaths are occurring 85% in low- and middle-income countries. The 17.7 million deaths are accounts from cardiovascular diseases every year. Cancer is causing 9.0 million deaths; respiratory diseases are occurring 3.9 million deaths and diabetes are accounting for 1.6 million of deaths every year.

Non-communicable diseases (NCDs) refer to a group of medical conditions that are not caused by infectious agents and are generally of long duration. These diseases tend to progress slowly over time and are primarily influenced by genetic, physiological, environmental, and behavioral issues. NCDs are also known as chronic diseases like cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (like chronic obstructive pulmonary disease and asthma), and diabetes.

The incidence of NCDs has been steadily increasing globally, posing significant challenges to healthcare systems and economies worldwide. Factors contributing to the rise of NCDs include aging populations, urbanization, unhealthy diets, physical inactivity, tobacco use, and harmful use of alcohol. These diseases not only lead to significant morbidity and mortality but also place a substantial load on individuals, families, and societies as a whole due to their long-term management and treatment requirements.

About Basic Paradigm

A team of experienced social development professionals established a fundamental framework. The organization seeks to enhance health, nutrition, and well-being, ultimately contributing to the achievement of Sustainable Development Goal 3, which focuses on ensuring universal health and wellness.

The organization is involved in a variety of projects spanning different sectors, including health, education, nutrition, child protection, and gender equality.

The primary objective is to assist implementation organizations in optimizing program operations, assessing social impact, improving financial sustainability, making data-driven decisions, expanding geographically, and refining organizational focus.

Purpose of the research

Research on non-communicable diseases (NCDs) serves a critical purpose in addressing the significant health challenges posed by these conditions. By conducting research, scientists aim to deepen our understanding of the causes, risk factors, and mechanisms underlying NCDs. This knowledge is essential for developing effective prevention strategies that promote healthier lifestyles and reduce exposure to risk factors such as tobacco use, unhealthy diets, physical inactivity, and environmental pollutants.

Furthermore, research contributes to the development of innovative diagnostic tools and biomarkers that enable early detection of NCDs, allowing for timely intervention and improved treatment outcomes. Additionally, research efforts focus on advancing therapeutic options and optimizing healthcare delivery systems to enhance patient care and support.

Ultimately, research on NCDs plays a pivotal role in informing evidence-based policies, shaping public health interventions, and mitigating the socio-economic burden associated with these chronic diseases on individuals, communities, and healthcare systems.

Objective of the research

The objective of the study are: -

- To analyze the current trends and pervasiveness rates of non-communicable diseases (NCDs) globally.
- To identify the major risk factors contributing to the rise of NCDs.
- To explore the socioeconomic and demographic determinants associated with NCDs.
- To evaluate existing interventions and strategies aimed at prevention and management of NCDs.
- To propose recommendations for effective policies and interventions to mitigate the burden of NCDs.

Chapter 2: Review of Literature

1. A report by the World Economic Forum and the Harvard School of Public Health September 2011. Klaus Schwab Founder and Executive Chairman World Economic Forum

As policymakers work to reduce poverty and income inequality, they are increasingly focused on the growing challenge of non-communicable diseases (NCDs), which account for 63% of all deaths worldwide. These diseases, including cardiovascular issues, cancers, chronic respiratory diseases, and diabetes, affect both high- and low-income countries, impacting all age groups with about one-quarter of NCD deaths occurring in people under 60. NCDs significantly reduce productivity and increase healthcare costs, with their impact expected to rise as the global population ages and grows. In response, the United Nations held its first High-Level Meeting on NCDs in 2011. The World Economic Forum and the Harvard School of Public Health have highlighted the severe economic burden of NCDs, projecting a potential loss of \$47 trillion in global output over the next two decades. Although high-income countries currently bear the brunt of this burden, developing countries will face increasing impacts. Cardiovascular disease and mental health conditions are the largest contributors. Business leaders also express significant concern about NCDs affecting their companies, especially where healthcare quality or access is poor. However, there are many strategies to prevent and control NCDs, such as WHO's "Best Buys" interventions and programs targeting youth behavior changes and more cost-effective care models. This report aims to guide economic leaders in allocating resources to address the formidable economic threat posed by NCDs.

2. Non Communicable Disease Risk Factors and their Trends in India [Asian Pac J Cancer Prev](#). 2017

on-communicable diseases (NCDs) like cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases account for around 68% of global deaths and 60% of deaths in India. These diseases, particularly cardiovascular issues, respiratory diseases, cancers, and diabetes, cause 82% of NCD deaths. Most NCD deaths occur in low and middle-income countries, including India, due to rapid urbanization and associated risk factors such as tobacco and alcohol use, physical inactivity, poor diet, and high blood pressure. India, with its 1.3 billion population, has a high burden of NCDs in the South-East Asia Region. Major risk factors include high blood pressure, high blood sugar, and tobacco use. The World Health Organization (WHO) and India are working on strategies to prevent and

control NCDs, including national health programs and periodic surveys like the National Family Health Survey and Global Adult Tobacco Survey. Despite these efforts, challenges remain, such as incomplete data and the need for more comprehensive surveys. This paper explores the epidemiology and data availability of NCD risk factors in India.

3. Prevalence of Non-Communicable Diseases in India's Older Adults

AUTHORS: [MONA](#) | [SURI PUBLISHED](#) on *Feb 16, 2024*. This paper discusses the burden of NCDs among elder women in India, influenced by "social determinants of health" like income, education, employment, housing, and environment.

Women's health, especially in older age, has been neglected and underfunded, with women facing greater illiteracy, financial insecurity, and disease. Social biases and gender roles contribute to this, with older women doing more unpaid care work and being segregated into low-paying jobs. They have limited access to technology and face gender-based violence. Nutritional deficiencies and health issues like anemia and obesity are more common in older women than men.

In 2021, India had 138 million elderly people, with 71 million being women. The proportion of elderly people in the population has been increasing since 1961.

Chapter 3: Methodology

About the study

Objectives

- To analyze the current trends and prevalence rates of non-communicable diseases (NCDs) globally.
- To identify the major risk factors contributing to the rise of NCDs.
- To explore the socioeconomic and demographic determinants associated with NCDs.
- To evaluate existing interventions and strategies aimed at prevention and management of NCDs.
- To propose recommendations for effective policies and interventions to mitigate the burden of NCDs.

Research Methodology:

Qualitative Analysis: Literature review and synthesis of qualitative studies exploring the socio-economic and cultural determinants of NCDs. This will include examining case studies and policy documents from different countries to understand successful interventions and challenges faced in their implementation.

Nature of the Study:

This study is a descriptive epidemiological analysis conducted over a period of five years, focusing on the incidence and prevalence rates of major NCDs such as cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases.

Data Collection:

Secondary data will be collected from national health surveys, health department reports, and peer-reviewed literature. The data will include demographic information, disease prevalence rates, risk factor profiles, and mortality statistics related to NCDs.

Tools for Data Analysis:

Microsoft Excel.

Chapter 4: Findings

Prevalence and Impact

Global Burden: NCDs account for 71% of all deaths globally, which amounts to over 41 million people each year.

Cardiovascular diseases are the leading cause every year 17.9 million deaths by which cancers (9.0 million), from respiratory diseases (3.9 million), and from diabetes (1.6 million).

Premature Deaths: Around 15 million of these deaths are premature (occurring ages between 30 and 69), affecting productivity and economic growth significantly.

Most premature NCD deaths (over 85%) occur in low- and middle-income countries, exacerbating health inequities.

Risk Factors

Tobacco Use: Responsible for around 8 million deaths annually.

Over 80% of the world's 1.1 billion smokers live in low- and middle-income nations.

Unhealthy Diet: High intake of salt, sugar, and trans-fats contributes to high blood pressure and obesity. Poor diet is linked to increased risk of cardiovascular diseases, diabetes, and certain cancers.

Physical Inactivity: Globally, 1 in 4 adults is not active enough.

Lack of physical activity increases the risk of heart disease, stroke, and diabetes.

Economic Impact

Healthcare Costs: Treating NCDs is costly, with global healthcare expenditure on diabetes alone estimated at USD 760 billion annually. These costs strain health systems, particularly in low-resource settings.

Productivity Losses: NCDs lead to significant productivity losses due to premature death and disability. In some countries, these losses amount to 2-5% of GDP annually.

Cancer

Global Prevalence: Cancer is a foremost cause of morbidity and death universal. In 2020, there were a projected new cancer cases 19.3 million and cancer deaths 10.0 million worldwide.

Types of Cancer: The most common types include lung, breast, colorectal, prostate, and stomach cancers.

2. Diabetes

Global Prevalence: The effect of diabetes is 463 million in the age of 20-79 years adults in the world, and it is expected to reach 700 million according to the current trends.

Types of Diabetes: Type 2 diabetes comprises most cases, driven by increasing obesity rates and sedentary lifestyles.

3. Cardiovascular Diseases (CVDs)

Global Prevalence: CVDs are the foremost cause of death worldwide, accounting for over 17.9 million deaths yearly.

Types of CVDs: Major types contain coronary artery disease, stroke, heart failure, and hypertension.

Chapter 5: Result and Discussion

Non-Communicable Diseases (NCDs): Impact and Results

Non-communicable diseases (NCDs) are transferred from one person to another person. The most common types are cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. These diseases significantly impact individuals, communities, and healthcare systems globally

Cardiovascular Diseases (heart diseases)

Impact on Individuals:

Health: Conditions like heart attacks, strokes, and hypertension lead to severe health complications, disability, and can be fatal if not properly managed.

Daily Life: Patients often experience reduced physical capabilities and may need ongoing medical care, impacting their ability to work and enjoy daily activities.

Societal Impact:

Healthcare Costs: High due to frequent hospital visits, treatments, and medications.

Economic Burden: Lost productivity and increased healthcare expenditure strain families and national economies.

Cancers

Impact on Individuals:

Health: Various types of cancer (e.g., breast, lung, prostate) require intensive treatments like chemotherapy, radiation, and surgery. Early detection is crucial for better outcomes.

Emotional Well-being: The diagnosis and treatment process can be mentally and emotionally taxing.

Societal Impact:

Healthcare Resources: Significant allocation for treatment facilities and research.

Economic Strain: High costs of treatment and loss of workforce productivity.

Chronic Respiratory Diseases

Impact on Individuals:

Health: Diseases like chronic obstructive pulmonary disease (COPD) and asthma make breathing tough, leading to frequent hospital visits and a need for long-term medication.

Quality of Life: Constant management of symptoms and limitations in physical activity.

Societal Impact:

Healthcare System: Increased burden due to frequent admissions and long-term treatment needs.

Public Health: Increased need for air quality regulations and smoking cessation programs.

Diabetes

Impact on Individuals:

Health: Poor blood sugar control in diabetes can lead to severe complications like kidney failure, blindness, and cardiovascular diseases.

Lifestyle Adjustments: Continuous monitoring of blood sugar levels, dietary changes, and regular medication.

Societal Impact:

Healthcare Costs: Ongoing costs for medications, monitoring equipment, and treatment of complications.

Economic Impact: Reduced productivity and increased absenteeism in the workforce.

Common Risk Factors and Prevention

Risk Factors:

Lifestyle Choices: Unhealthy diets, physical inactivity, tobacco use, and excessive alcohol consumption significantly contribute to the development of NCDs.

Environmental Factors: Exposure to pollution and poor living conditions can increase risk.

Prevention and Management:

Healthy Living: Adopting balanced food, daily physical activity, avoiding tobacco, and avoiding alcohol can decrease the risk.

Regular Check-ups: Early detection through regular health screenings can prevent complications.

Global Perspective

Prevalence:

NCDs are the leading cause of death globally, responsible for over 70% of all deaths.

The burden is especially high in low and middle-income countries.

Healthcare System Impact:

Resource Allocation: Significant resources are needed for prevention, treatment, and management of NCDs.

Policy Implications: Governments need to implement effective public health policies to address risk factors and improve healthcare infrastructure.

Chapter 6: Recommendation

Encourage Balanced Diets:

Highly nutritious but affordable foods to be sold widely in low-income areas.

Try To Legalize for A Healthy Diet People Need Daily Components It Contains That Means Vegetables, Fruits and Protein (Rich Meat)

Increases physical activity

Develop community-based exercise program and enhance PA-supportive infrastructure

Cut down on tobacco and alcohol

Carry out the awareness campaign in society of tobacco and alcohol control among people.

Improve healthcare access

More availability of regular health checks for identification the non-communicable diseases, such as hypertension, diabetes and cancer.

Chapter 7: Conclusion

Non-communicable diseases are a significant global burden, affecting millions of lives and placing unmanageable pressure on health systems and economies. Understanding the human toll of these diseases underlines their broader health importance, requiring prevention, early detection and disease management to prevent deaths and compromised quality of life through disability for those afflicted.

A comprehensive solution - involving the individual, community, health care providers and policymakers is necessary to address non-communicable diseases. We can do this by promoting healthy lifestyles, improving healthcare access, addressing environmental factors including pollution and obesity with specific policies to reduce consumption of tobacco, sugar sweetened beverages etc -- engaged communities that are active partners in their wellness together with strong legal frameworks.

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